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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/808,326	03/14/2001	Gregory L. Hobson	7889	3856

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POLSTER, LIEDER, WOODRUFF & LUCCHESI
12412 POWERSCOURT DRIVE SUITE 200
ST. LOUIS, MO 63131-3615

EXAMINER

DIEP, NHON THANH

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/808,326	Applicant(s) HOBSON ET AL.	
	Examiner Nhon T. Diep	Art Unit 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
 4a) Of the above claim(s) 5, 6, 12, 18-23, 34 and 35 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-10, 24 and 36-40 is/are allowed.
- 6) ☒ Claim(s) 1-4, 11, 13-17, 24-26, 28-33, 41 and 42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see remarks (pages 14-15), filed 8/31/2005, with respect to claims 36-40 have been fully considered and are persuasive. The rejection of claims 36-40 has been withdrawn.

2. Applicant's arguments with respect to claims 1-4, 11, 13-17, 24-26, 28-33 and 41-42 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 4, 13 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Pomerleau (US 5,091,780).

Pomerleau discloses a trainable security system comprising the same digital video recording system comprising:

a camera directed at a scene of interest to view the scene and to continuously generate a plurality of video images thereof (fig. 2, el. 14), each of said video images comprising a plurality of pixel elements (fig. 2, el. 24);

an image processor configured to process blocks of said pixels and to compare each of said blocks against a corresponding block from a previously established reference image of said scene to determine if any changes have occurred therein, said

processor configured to identify which of said blocks in said video images have changed relative to the corresponding block in said previously established reference image (fig. 2, el. 34-36-38 and col. 4, ln. 29-37); and

a memory associated with said image processor, said memory configured to store said reference image and said identified changed blocks in said memory (fig. 2, el. 42 and col. 5, ln. 65 – col. 6, ln. 1) as specified in claim 1.

Regarding claim 4: Since, Pomerleau does not particularly disclose the type of camera 14, only refers to as video camera, pixel elements without any teaching of conversion from analog to digital, the examiner assumes the camera Pomerleau uses is indeed a digital camera.

Regarding claim 13: Pomerleau shows image in earlier in time (col. 4, ln. 29-37).

Regarding claim 24: Pomerleau discloses a trainable security system comprising the same digital video recording system comprising:

a plurality of cameras directed towards at least one scene of interest to view said at least one scene and to continuously generate a plurality of video images thereof (fig. 3, el. 16, col. 4, ln. 5-6);

an image processor configured to compare said plurality of video image generated by said cameras with a plurality of previously established reference images of said at least one scene to identify any regions of change therein, said processor configured to store only those regions of said video images which differ from said a corresponding region of the reference image and the reference image in a memory associate with said image processor (fig. 3, el. 38-36-38-21); and

wherein said image processor is further configured to access said memory to retrieve at least one video imago of interest produced by said cameras (fig. 3, el. 42 and col. 6, ln. 32-39) as specified in claim 24.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-3, 11, 14, 17, 25 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pomerleau.

As applied to claim 1 above, it is noted that Pomerleau does not particularly disclose the camera is an analog camera and the system further includes a frame grabber configured to receive and generate a digital signal as specified in claims 2-3. The examiner takes Official Notice that converting an analog signal to a digital signal is a well known feature in the pertinent art and therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to convert analog signal produced by an analog camera to a digital signal for processing in the digital domain which is more accurate and much faster.

Regarding claims 11 and 33: As indicated in col. 6, ln. 55-59, any pictures can be selectively and in the case of changing field of view of surveillance, it would have been obvious that the reference image needs to be changed or updated.

Regarding claims 14 and 17: Fig. 3, el. 54 shows a police alarm for summoning the authority and therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to store authentication data with the video images for police usage at later time.

Regarding claim 25: Pomerleau, fig. 3, el. 42, shows the image processor is configured to access the memory to retrieve a plurality of video images of interest produced by the cameras.

7. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pomerleau, in view of Burt et al (cited in the previous Office Action).

As applied to claim 24 above, it is noted that Pomerleau does not particularly disclose wherein said image processor is configured to generate a combined video image from said plurality of video images generated by said cameras and to compare said combined video image with a combined reference image composed of a plurality of reference images of said at least one scene as specified in claim 26. Burt et al teaches "mosaic is a data structure that melds visual information from a set of images taken at a plurality of time instants, viewpoints, or fields of view. The various images are aligned and combined to form, for example, a panoramic view of a scene as a single still image. Importantly, a mosaic is not limited to a combination of distinct images, but may also be combination of mosaics. The invention is a system that automatically forms a mosaic from a plurality of images for utilization by various application systems and that the surveillance system uses a mosaic for detection of motion. for example, for security purposes or for motion detection on a scene." (col. 3, ln. 43-52). Therefore, it would

have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of Pomerleau, by combining visual information from a set of images taken at a plurality of time instants, viewpoints, or fields of view as taught by Burt et al. Doing so would to widen surveillance field of views

8. Claims 15, 28-32 and 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pomerleau, in view of Winter et al (cited by the applicants).

Pomerleau discloses a trainable security system comprising the same method of recording video image and storing and retrieving the same comprising:

viewing a scene of interest with a camera and generating video images thereof (fig. 2, el. 14);

processing said digital signal, said processing including
comparing blocks or the video image represented by a digital signal with
corresponding blocks of a previously established reference of the scene to determine if
any change have occurred in any of the blocks therein, and storing the contents of said
blocks in a memory if the image block differs from the corresponding block of the
reference image with date and time data appended to each stored video image
represented by a digital signal (fig. 2, el. 34-36-38 and col. 3, ln. 32-45); and
accessing said memory to retrieve the contents of said digital signals to recreate the
video images produced by said cameras (fig. 2, el. 42) as specified in claim 28; a step
of reducing image resolution (col. 4, ln. 58-64 and col. 8, ln. 31-35) as specified in claim
15; said video images are acquired from said camera at one frame rate and from said
memory at a second predetermined frame rate (col. 4, ln. 58-64 and col. 8, ln. 31-35:

images acquired at high resolution but processed and stored at lower resolution) as specified in claim 29; further including a plurality of cameras each of which is directed at a respective scene of interest, and the method further includes each camera continuously viewing each respective scene and generating video images thereof at a predetermined frame rate, converting each frame of video image from each camera to a signal, processing each digital signal and storing the processed video images in the memory (fig.3, el 46, 38, 21, 42) as specified in claim 32. It is noted that Pomerleau does not particularly disclose that:

- a. converting each frame of video imagery produced by said camera to a digital signal; and
- b. the memory being accessed to retrieve said video images simultaneously with digital signals being stored therein, and the memory being accessed at any desired location representing a time of interest whereby video images stored in said memory do not to be sequentially scanned to locate a video image of interest as specified in claims 28 and 41-42.

Regarding to a: Since, Pomerleau does not particularly disclose the type of camera 14, only refers to as video camera, pixel elements without any teaching of conversion from analog to digital, the examiner assumes the camera Pomerleau uses is indeed a digital camera; however, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to convert analog signal produced by an analog camera to a digital signal for processing as this conversion circuit is a very well known circuit in the pertinent art.

Regarding to b: Winter et al teaches memory being accessed to retrieve said video images simultaneously with digital signals being stored therein, and the memory being accessed at any desired location representing a time of interest whereby video images stored in said memory do not to be sequentially scanned to locate a video image of interest (col. 2, ln. 39-61 and col. 8, ln. 14-67). And therefore, it would have been obvious to one of ordinary skilled level in the art at the time the invention was made to modify the system of Pomerleau by providing random access memory capability as taught by Winter et al. Doing so would help to speedily access stored information.

Regarding claim 30: It is well known to access video information from a location remote therefrom. Official Notice served

Regarding claim 31: Pomerleau, fig. 3, el. 54 shows a police alarm for summoning the authority and therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to store authentication data with the video images for police usage at later time.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhon T. Diep whose telephone number is 571-272-7328. The examiner can normally be reached on m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ND, 6 Feb 06



NHON DIEP
PRIMARY EXAMINER